Mr. Alpert’s Robotics Class Research Paper Assignment

The purpose of this assignment is to show the diversity of uses for robots in our society either in use today or in late stages of development.

You are to choose one example of a robot which has all of the characteristics of robots as we defined them in class, i.e. the robot must sense the environment with sensors, respond to it with actuators, have its own power supply and processor. It must also be able to make decisions in a logical, predetermined way using a binary language as compiled by its creator.

Possible examples include but are not limited to:

1. Robotic cars/ trucks/ mass transportation (subways, trains)
2. Robotic surgery
3. Artificial intelligence (AI)
4. Robots in industry (manufacturing)
5. Robots in warehousing, distribution
6. Robotic vacuum (Roomba)
7. Robotic agriculture (harvesting, threshing etc.)
8. Robots in entertainment
9. Robots as hotel “bellboys” or other uses to deliver goods to guests, etc.
10. Military use of robots, drones, bomb disposal units etc.

Your paper must be based on research from credible sources (not Wikipedia) and must contain the following:

1. Topic
2. Purpose of the robot
3. Name of the robot
4. Types of sensors used
5. Types of actuators and how operated
6. Processor name and characteristics (how fast, how much memory etc.)
7. What human tasks does this robot accomplish?
8. Year discovered or put into use (may be future use)
9. How is this robot superior to human action?
10. Ethical question of your choice, “should we entrust human actions which involve higher level thinking to this machine?” “Who is responsible when this robot makes a mistake?”
11. At least five sources in proper MLA format (you may use parentheticals)
12. Your paper must be written in eleven point Arial type face, double spaced, MLA format.
13. Your paper must be five pages long not including your works cited page.
14. If you include illustrations, then the length of the paper must be increased accordingly.
15. Your paper will be due on March 24 which is the last day before spring break.
16. It will be graded as part of quarter four.